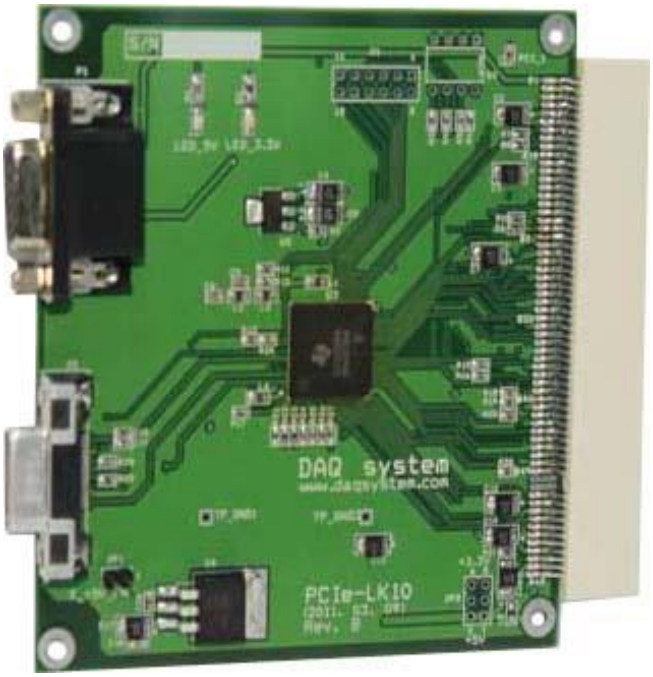
PCIe-LK01 & PCIe-LK10

User Manual

Version 1.0



DAQ SYSTEM
Measurement & Automation

Contents

1. PCIe-LK01 & PCIe-LK10 Introduction ---------- 2

1-1 PCIe-LK01 & PCIe-LK10 Features ---------- 3

1-2 Applications ---------- 3

2. PCIe-LK01 & PCIe-LK10 Board Description ---------- 4

2-1 PCIe-LK01 & PCIe-LK10 Connection ---------- 4

2-2 P1 Connector Pin-Out ---------- 5

2-2 J8 & J2 Connector Pin-Out ---------- 6

Appendix

A-1 PCIe-LK01 Board Size ---------- 7

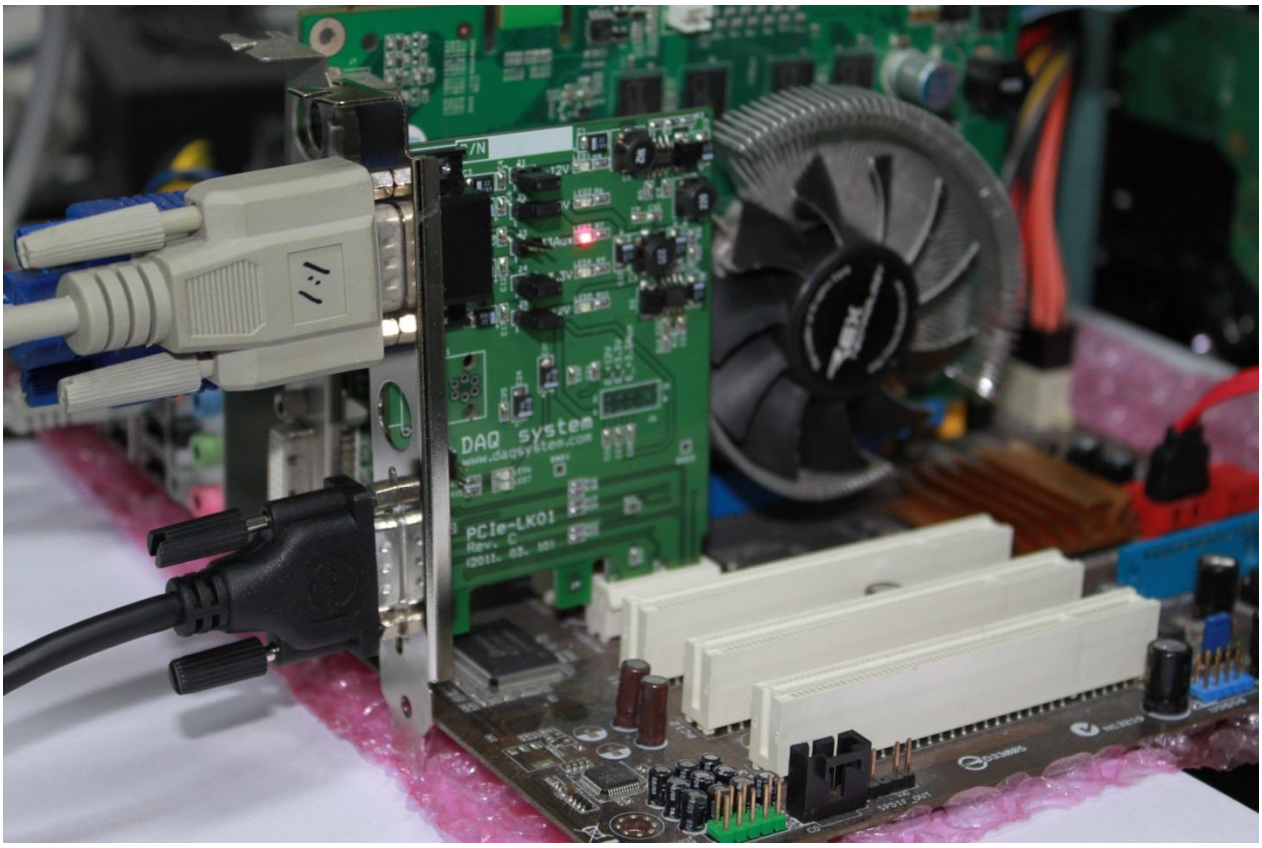
A-2 PCIe-LK10 Board Size ---------- 7

A-3 Repair Regulations ---------- 8

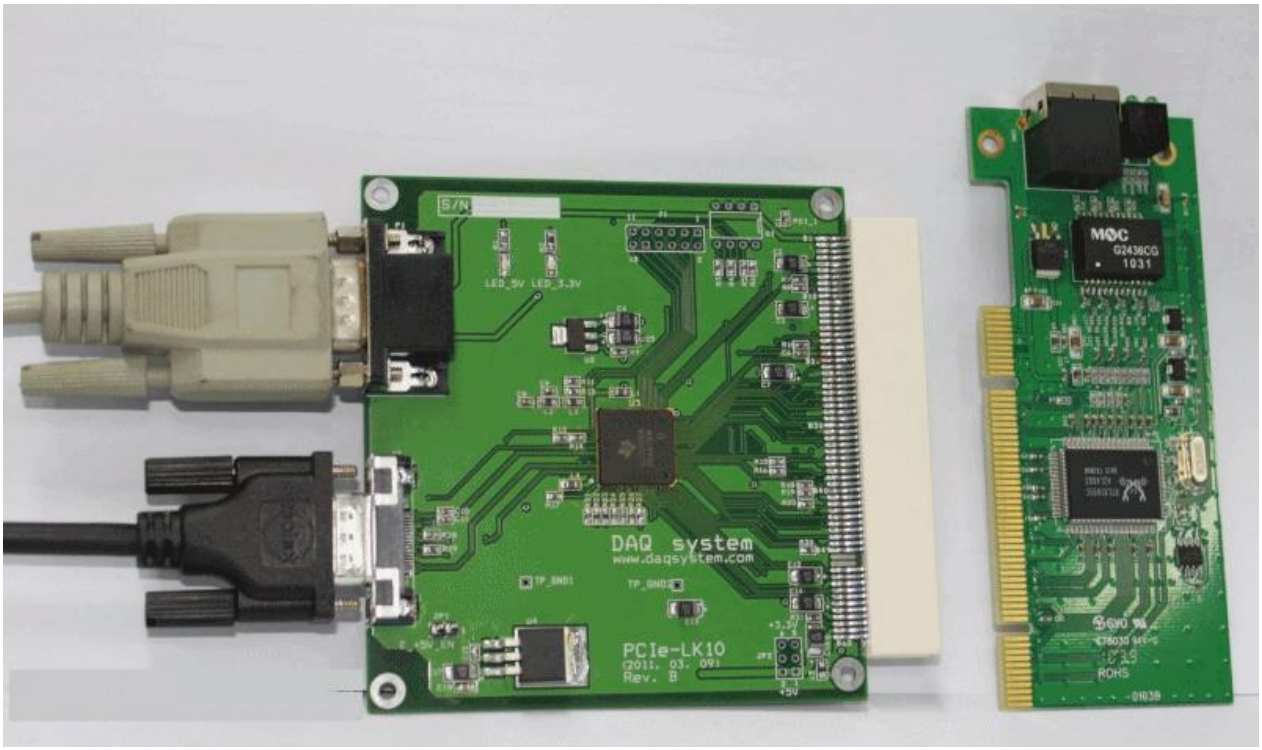
1. PCIe-LK01 & PCIe-LK10 Introduction

The PCIe-LK01 PCI Express card is a set of PCIe-LK10 board and is used to interface external PCI products in a general PC. It is a board that supplies the power and PCI Express signals of the board and allows PCI products to interface with a PC without a driver.

[Figure 1-1] shows the connection between PCIe-LK01 and PC with the PC case removed for easy understanding. [Figure 1-2] shows the connection between PCIe-LK10 used together with PCIe-LK01 and general PCI products. As shown in [Figure 1-2], PCI products can be used without directly connecting them to the PC's PCI slot.



[Figure 1-1. PCIe-LK01 & PC Connection]



[Figure 1-2. PCIe-LK10 & PCI Product Connection]

1-1 PCIe-LK01 & PCIe-LK10 Features

- x1 PCI Express link host interface
- Compliant with PCI Express Base Specification 1.1
- Supply of various power sources (±12V, 3.3V, 3.3V AUX, 5V)

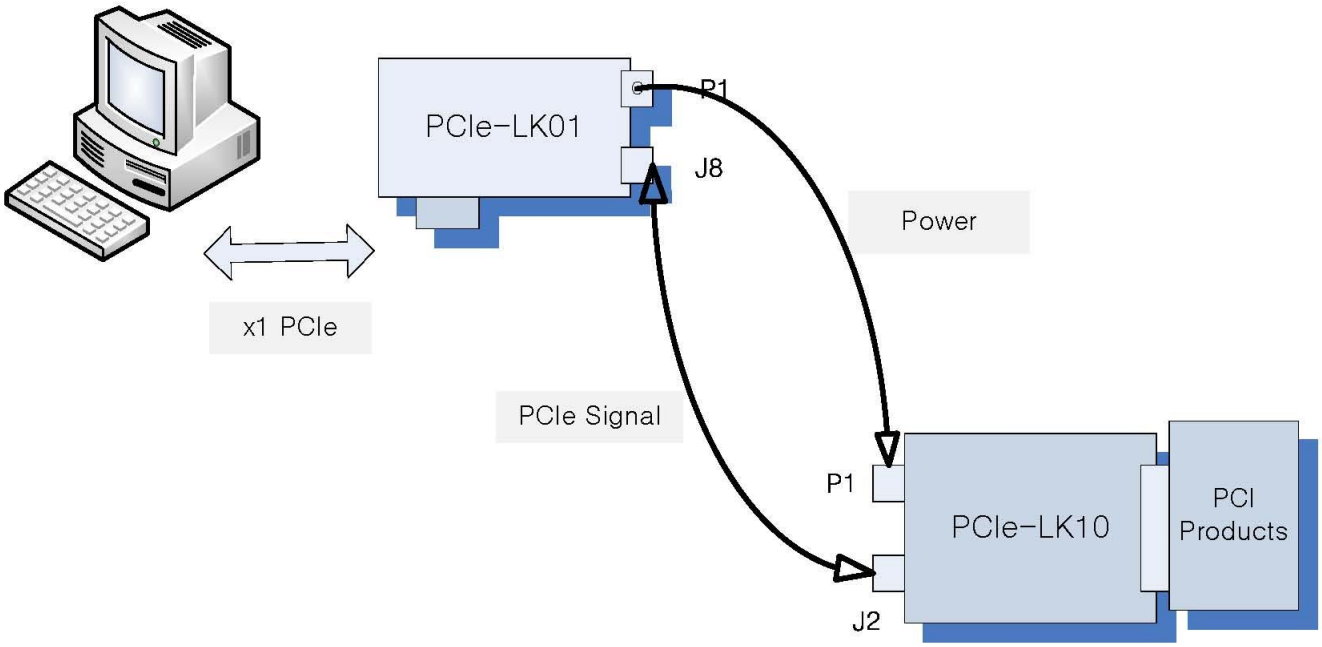
1-2 Applications

- External PCI Products Interface on PC
- Industry Control Board
- Test Board for developing PCI Products without PCI slot on PC

2. PCIe-LK01 & PCIe-LK10 Board Description

PCIe-LK01 supplies PCI Express signal through EX_1X_CON (MDR-18pin: J8, J2) connector, and various power sources (±12V, 3.3V, 3.3V AUX, 5V) through DB-15 (P1) connector to PCIe -Transfers to the LK10 board, allowing PCI products to interface with a PC without a driver or external power supply.

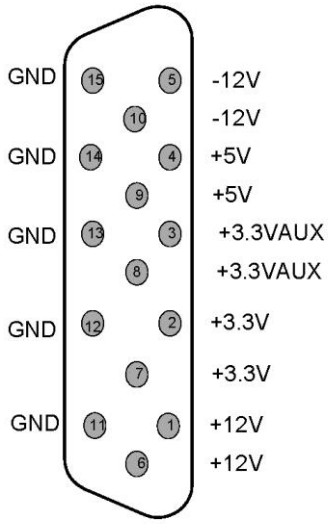
2-1 PCIe-LK01 & PCIe-LK10 Connection



[Figure 2-1. PCIe-LK01 & PCIe-LK10 Connection]

2-2 P1 Connector Pin-Out

The various power sources (±12V, 3.3V, 3.3V AUX, 5V) of the PCIe-LK01 are transferred to the P1 connector of the PCIe-LK10 board through the P1 (DB-15) connector. The PCIe-LK10 board receives this power and uses it.



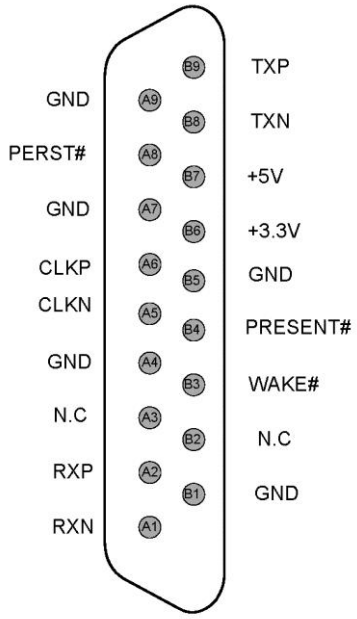
[Figure 2-2. PCIe-LK01 & PCIe-LK10 P1 Connector Pin-out]

[Table 1. P1 Connector Description]

No.	Name	Description	Remark
1	**+12V**	+12V Power	
2	**+3.3V**	+3.3V Power	
3	**+3.3VAUX**	+3.3V Auxiliary Power	
4	**+3.3V**	+3.3V Power	
5	**-12V**	-12V Power	
6	**+12V**	+12V Power	
7	**+3.3V**	+3.3V Power	
8	**+3.3VAUX**	+3.3V Auxiliary Power	
9	**+5V**	+5V Power	
10	**-12V**	-12V Power	
11	**GND**	Ground	
12	**GND**	Ground	
13	**GND**	Ground	
14	**GND**	Ground	
15	**GND**	Ground	

2-3 J8 & J2 Connector Pin-Out

These connectors transmit the Express PCI signal of PCIe-LK01 to J2 connector of PCIe-LK10 board through J8 (MDR-18) connector. The PCIe-LK10 board receives this signal and converts it into a PCI signal to provide an interface with external PCI products.



[Figure 2-3. PCIe-LK01 J8 & PCIe-LK10 J2 Connector Pin-out]

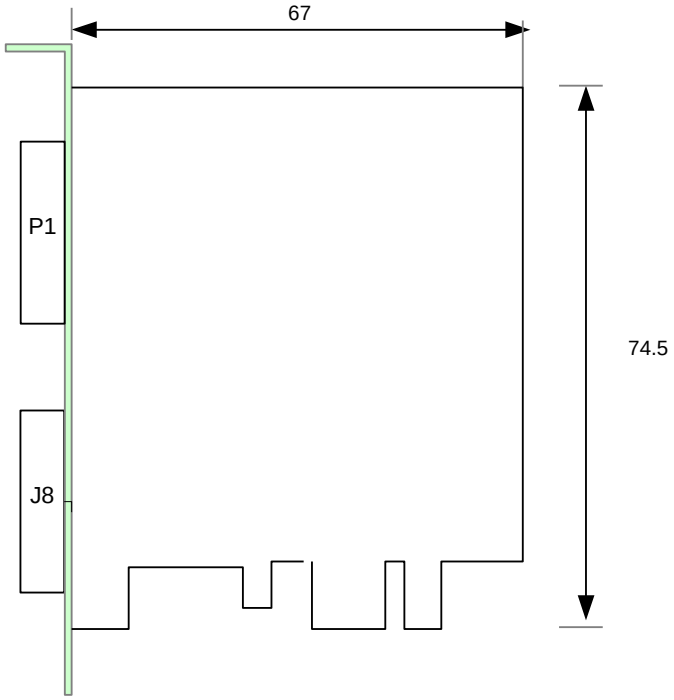
[Table 2. J8 & J2 Connector Description]

No.	Name	Description	Remark
A1	**RXN**	Negative Receiver	
A2	**RXP**	Positive Receiver	
A3	**N.C**	No Connection	
A4	**GND**	Ground	
A5	**CLKN**	Negative Reference Clock	
A6	**CLKP**	Positive Reference Clock	
A7	**GND**	Ground	
A8	**PERST#**	Power Stable Signal	
A9	**GND**	Ground	
B1	**GND**	Ground	
B2	**N.C**	No Connection	
B3	**WAKE#**	Wake-Up System	
B4	**PRESENT#**	Add-in Card Presence Detect	
B5	**GND**	Ground	
B6	**+3.3V**	+3.3V Power	
B7	**+5V**	+5V Power	
B8	**TXP**	Positive Transceiver	
B9	**TXN**	Negative Transceiver	

Appendix

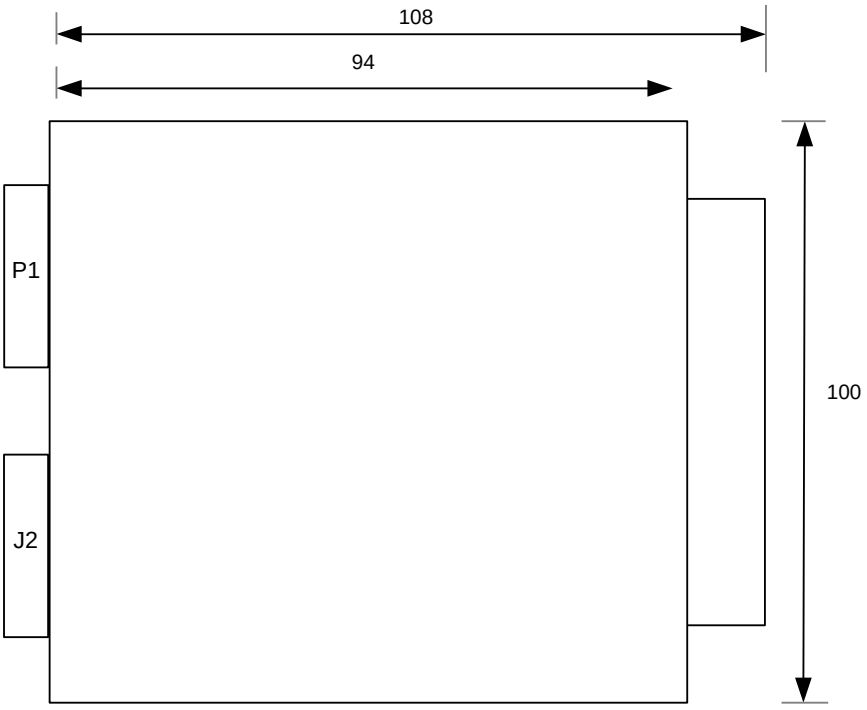
A-1 PCIe-LK01 Board Size

The size of the board is as follows. (67 x 74.5mm)



A-2 PCIe-LK10 Board Size

The size of the board is as follows. (108 x 100mm)



A-3 Repair Regulations

Thank you for purchasing DAQ SYSTEM's product. Please refer to the following regarding Customer Service stipulated by DAQ SYSTEM.

(1) Please read the user's manual and follow the instructions before using the DAQ SYSTEM product.

(2) When returning the product to be repaired, please send it to the head office with the symptoms of the malfunction as well.

(3) All DAQSYSTEM products have a one-year warranty.
-. The warranty period is counted from the date the product is shipped from DAQ SYSTEM.
-. Peripherals and third-party products not manufactured by DAQ SYSTEM are covered by the manufacturer's warranty.
-. If repair is required, please contact the contact points below.

(4) Even during the free repair warranty period, paid repairs are made in the following cases.
① Failure or damage caused by not following the user's manual
② Failure or damage caused by customer negligence during product transportation after purchase
③ Natural phenomena such as fire, earthquake, flood, lightning, pollution, etc. or power supply exceeding the recommended range malfunction or damage
④ Failures caused by inappropriate storage environment (eg, high temperature, high humidity, volatile chemicals, etc.) damaged
⑤ Failure or damage due to unreasonable repair or modification
⑥ Products whose serial number has been changed or intentionally removed
⑦ In the event that DAQ SYSTEM determines that it is the customer's negligence for other reasons

(5) The customer must bear the shipping cost of returning the repaired product to DAQ SYSTEM.

(6) The manufacturer is not responsible for any problems caused by incorrect use regardless of our warranty provisions.

MEMO

Contact Point

Web sit : https://www.daqsystem.com

Email : postmaster@daqsystem.com

DAQ SYSTEM
Measurement & Automation